

The only basis given by the Examiner for requiring a restriction is that the sensitive surface protective material, as claimed, could be used as a filter material. While the Applicants agree that the nonwoven web used to make the sensitive surface protective material could be used as a filter material, Applicants point out that they are not claiming a nonwoven web per se, but are claiming a material which protects a sensitive surface of an article having a sensitive surface. Furthermore, the storage sleeve of claims 13-26 and the stack of articles having a sensitive surface of claim 28 can not be used to filter an air stream, as suggested by the Examiner.

Applicants respectfully request that the Examiner reconsider and withdraw the restriction requirement for the forgoing reasons. In any event, Applicants reserve the right to request that the invention of Group II be rejoined with the invention of Group I, in accordance with MPEP 8.21.04, upon a finding that some or all of the claims of Group I are allowable.

Applicants amendments to the claims are supported by the specification and drawings, as originally filed. The amendments to claims 2, 16, 20, 23 and 24 are clerical in nature. The amendments to claims 11 and 20, are supported by page 15, line 23 of the specification. Newly added claims 29-31 are supported by page 16, line 26 –page 17, line 15 and other locations of the specification. Therefore, new matter is not introduced by the forgoing amendments to the claims.

Claims 1, 2, 12, 13, 16, 20, 23, 24, and 28 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, for failing to particularly point out and distinctly claim the subject matter which is regarded as the invention. Applicants respectfully **traverse** this rejection.

The Examiner finds that the language appearing in claims 1 and 13 “a pattern having continuous bonded areas defining a plurality of discrete unbonded areas” is indefinite. First, the Applicants point out that the Examiner provides no reasoning why this language is found to be indefinite. Applicants will not attempt to speculate why the Examiner finds this language to be indefinite. Further, it is pointed out that the specification describes this bond pattern at page 8, line 30 – page 9, line 11. In addition, this phrase has an art recognized meaning, since similar language appears in the claims of U.S. Patent No. 5,858,515, which is incorporated by reference into the Applicants' specification.

In claims 2 and 24, the term “monocomponent” has been amended to its correct spelling.

Next, claim 12 was found to be indefinite for the reasons stated in the Office Action. In response to this rejection, claim 12 has been cancelled in favor of claim 29. Claim 29 addresses the Examiner's concerns with claim 12.

Claim 16 has been amended to depend from claim 13.

The term "thermoplastic" has been added to claims 20 and 23, per the Examiner's suggestion.

It is respectfully submitted that the forgoing amendments to the claims renders the rejection under 35 U.S.C. § 112, second paragraph moot.

Claims 1-8, 11 and 12 were rejected under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over U.S. Patent No. 5,858,515, to Stokes et al. in view of U.S. Patent No. 5,401,446 to Tsai et al. Applicants respectfully **traverse** this rejection.

Before addressing this rejection, Applicants believe that it would be beneficial to describe the claimed invention.

The present invention is directed to a material that protects articles having a sensitive surface from damage caused by particles, such as dust, dirt and the like. Articles, such as DVD's, CD's and the like, have surfaces which are easily damaged by particles, such as dust and dirt. These particles on the surface of a CD, DVD or the like, can damage the article by scratching the surface and causing the optical reader, in the case of CD's and DVD's to "skip" from one optical groove to another. Other surfaces, such as transparencies, lithographic disc and phonograph records can also be damaged by particles. The inventors of the present invention have discovered that the protective material of the present claims can be used to protect items with a sensitive surface, by storing the item in or in contact with the protective material of the present invention. The sliding action of placing the item with a sensitive surface allows the protective material to clean the sensitive surface of particles and the like. In addition, the particles are trapped by the protective material, preventing a majority of the captured particles from being redeposited onto the sensitive surface of the article.

As is pointed out in the specification on page 19, the unique structure of the claimed nonwoven web used in the sensitive surface protective material allows the particles and other contaminants to move into the web matrix. This, in conjunction with the electret treatment, gives a fabric material which is very effective in preventing damage to sensitive surfaces and allows

for effective cleaning (removal of particles) of the sensitive surface. This unique combination of properties is not taught or suggested in the prior art.

Turning to the prior art, the Examiner correctly states that Stokes et al. teaches a spunbond nonwoven web having a pattern of continuous bonded areas defining a plurality of discrete unbonded areas. In fact, the spunbond material of Stokes et al. is the material used in the present invention for the sensitive surface protective material, with the exception that the material is electret treated.

The Examiner quotes column 1, lines 24-27 of Stokes et al. to establish that the material of Stokes et al. is used in applications such as disposable personal care absorbent articles, clothing and a wide variety of other miscellaneous applications. However, this is a slight mischaracterization of the teachings of column 1 in Stokes et al. Column 1, lines 24-27 of Stokes et al. must be read in conjunction with the previous sentence in this paragraph. Together, this pair of sentences state:

“Mechanical fastening systems, of the type otherwise referred to as hook and loop fastener systems, have become increasingly widely used in various consumer and industrial applications. A few examples such applications include disposable personal care absorbent articles, clothing, sporting goods equipment and a wide variety of other miscellaneous articles.”

A careful reading of column 1, lines 20-27, of Stokes et al., reveals that mechanical fastening systems have become widely used in disposable personal care products and other miscellaneous articles. Reading the entire Stokes et al. patent reveals that the materials of Stokes et al. are useful as a loop fastening means in a disposable personal care product. There is no suggestion in Stokes et al. to use the material in a sensitive surface protective material. Stokes et al. does not teach or suggest that the material can be used to protect sensitive surfaces or that the material would be effective in protecting articles having sensitive surfaces from damage caused by particles. The Examiner indirectly acknowledges that Stokes does not teach that the material can be used to protect sensitive surfaces, by stating that the material of Stokes would inherently protect sensitive surfaces due to its soft nature and would inherently protect sensitive surfaces from damage caused by particles. The Examiner does not address why one skilled in the art would look to the teachings of Stokes to find motivation to select the material as a sensitive surface protective material, which protects a sensitive surface from damage caused by particles, such as dirt and dust. Applicants do agree; however, that the

materials of Stokes et al. are disclosed to be useful in personal care products, as a mechanical fastening system.

The Examiner correctly notes that the nonwoven web of Stokes et al. is not electret treated. To remedy this deficiency of Stokes et al., the Examiner relies upon Tsai et al. to show that it is known in the art to treat a nonwoven web to form an electret material and that electret materials will attract particles. While the Applicants agree that it is known in the art to electret treat a nonwoven web material, such as a filter material, there is no motivation found in Tsai to electret treat the material of Stokes et al. Why would one skilled in the art be motivated to electret treat the nonwoven web used in a mechanical fastening system? There is no disclosure in Stokes et al. which would suggest to one skilled in the art that an electret treatment of the nonwoven web would be beneficial. Further, there is no teaching in Stokes et al. which suggests that the material would be effective in trapping and holding particle, thereby preventing damage to a sensitive surface of an article having a sensitive surface.

To summarize, there is no motivation found in the combination of Stokes et al. and Tsai et al. to electret treat the nonwoven of Stokes, since the nonwoven web of Stokes et al. is used in a mechanical fastening system, and not a filter application. Further, other nonwoven webs have been used to protect sensitive surfaces from damage. See, for example, U.S. Patent No. 6,186,320 to Drews. However, there is no teaching in this reference to electret the nonwoven web to help attract particles to the nonwoven web from the sensitive surface. At the time of the invention to Drews, treating nonwoven webs to form an electret was known in the art. If were obvious to treat the nonwoven web used to protect a sensitive surface to form an electret material, surely Drews would have done so. The Examiner's attention is further directed to the further discussion below regarding the Drews patent.

Applicants direct the Examiner's attention to the Examples of the specification. In these examples, it is shown that the material of Stokes et al, without an electret treatment, is inferior to the electret treated material, when it comes to trapping and removing particles from the sensitive surface. Further, it was discovered, as stated on page 19 of the specification, that the structure of the material allows the dust and dirt to enter the nonwoven web matrix, allowing the material to continue to clean the particles from the sensitive surface efficiently. It is the combined electret treatment and structure of the nonwoven web material that gives the material an unexpected improvement in the cleaning ability to the sensitive surface protective material of the present claims.

For the forgoing reasons, it is respectfully submitted that the rejection of the claims based on the combination of Stokes et al. and Tsai et al. is untenable and should be withdrawn.

Claims 9 and 10 were rejected under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over U.S. Patent No. 5,858,515, to Stokes et al. and U.S. Patent No. 5,401,446 to Tsai et al, further in view of U.S. Patent No. 5,667,562 to Midkiff Applicants respectfully **traverse** this rejection.

The Examiner relies upon Midkiff to show that spunbond nonwoven webs are known in the art to have a Gurley stiffness less than 80 mg. While Applicants agree with the Examiner's statement, there is nothing in Midkiff which would direct on skilled in the art to use the material of Stokes et al. in a sensitive surface protective material, thereby curing the deficiencies of Stokes et al. and Tsai et al. noted above. Midkiff does not teach a spunbond nonwoven having "a pattern having continuous bonded areas defining a plurality of discrete unbonded areas" is useful as a sensitive surface protective material. Therefore, even though Midkiff does disclose that nonwoven spunbond webs are known in the art to have a Gurley stiffness in the range claimed by claims 9 and 10, Midkiff fails to cure the other above noted deficiencies of Stokes et al. and Tsai et al. Likewise, the rejection of claims 9 and 10 is also untenable.

Claims 13-26 were rejected under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over U.S. Patent No. 5,858,515, to Stokes et al. and U.S. Patent No. 5,401,446 to Tsai et al, further in view of U.S. Patent No. 6,186,320 to Drew Applicants respectfully **traverse** this rejection.

As is noted above, the combination of Stokes et al. and Tsai et al. fails to render the claimed protective material obvious. The Examiner merely relies upon Drew to show that storage sleeves having a structure similar to the Applicants claimed structure are known in the art. The Examiner finds that one skilled in the art would have found it obvious to substitute the nonwoven web of Drew with the nonwoven web suggested by the combination of Stokes et al. and Tsai et al.

Drew fails to remedy the deficiencies of Stokes et al. and Tsai et al. noted above. Further, Drews et al. further supports the non-obviousness of the present invention. Specifically, Drews shows a nonwoven web used as a sensitive surface protective material, but does not teach that the nonwoven web should be electret treated. Electret treated nonwoven webs were known in the art more than 4 years before Drews filed his patent application. Had using an electret

treated nonwoven been obvious to one skilled in the art, Drews would have surely stated that the nonwoven web should be electret treated. However, Drews did not. Drews would not want to electret treat his nonwoven web, since the electret treatment would have drawn particles to the nonwoven web. As is noted in the present specification, the structure of the claimed nonwoven web allows for the particle to be trapped by the matrix of the nonwoven web. In the case of Drews, nonwoven web is run through compression rollers to bond the nonwoven material. (See column 4, lines 56-65), and no specific bond pattern is described. If the nonwoven web of Drews is unable to allow the particles to enter the matrix, the particles would remain on the surface of the nonwoven web, thereby causing more scratching to the sensitive surface since the particles would remain in contact with the surface. Therefore, Drews would not want to electret treat his nonwoven web, due to the likelihood that the particles would remain on the surface of the nonwoven web used by Drews and in contact with the sensitive surface.

Hence, Drews fails to remedy the deficiencies of Stokes et al. and Tsai et al. The Applicants respectfully submit that this rejection also is untenable and should also be withdrawn.

Claim 28 was rejected under 35 U.S.C. § 103 as allegedly being obvious to one of ordinary skill in the art at the time the invention was made and thus unpatentable over U.S. Patent No. 5,858,515, to Stokes et al. and U.S. Patent No. 5,401,446 to Tsai et al, further in view Applicants' admitted prior art. Applicants respectfully **traverse** this rejection.

There is nothing in the admitted prior art which would suggest inserting a sensitive surface protective material between a stack of articles having a sensitive surface, wherein the sensitive surface protective material is an electret treated spunbond nonwoven web having a bond pattern having continuous bonded areas defining a plurality of discrete unbonded areas. The "admitted prior art", which the Examiner relies upon, only suggests that paper has been used to separate layer of transparencies having a sensitive surface. Therefore, the admitted prior art discussed in the specification does not render claim 28 obvious, as argued by the Examiner.

Finally, Applicant submitted an Information Disclosure Statement (IDS) on December 10, 2001 and on September 25, 2002. The Office Action mailed on December 5, 2002 did not acknowledge receipt of these IDS's and the Examiner did not return signed copies of the PTO-1449 forms. Attached are copies of the IDS's (without the references), including the PTO-1449 forms and the returned postcards showing that the USPTO received the IDS's. Applicants respectfully request that the Examiner return an initialed and signed copy of the PTO-1449

forms in the next Office Action. If the Examiner needs a copy of any reference cited on these forms, Applicants are willing to supply a copy of any or all references.

In view of the forgoing amendments and remarks, it is respectfully submitted that the above-identified application is in condition for allowance. Such allowance is respectfully requested.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

If the Examiner has any questions or concerns, the undersigned may be reached at: 770-587-7204.

Respectfully submitted,

Irwin J. SINGER ET AL.

By: 

Ralph H. Dean, Jr.

Registration No.: 41,550

Attorney for Applicants

CERTIFICATE OF MAILING

I, Ralph H. Dean, Jr., hereby certify that on March 5, 2003 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

By: 

Ralph H. Dean, Jr.

Appendix (Marked-up copy of the Amended Claims)

2. (once amended) The sensitive surface protective material according to claim 1, wherein the thermoplastic fibers comprise monocomponent ~~monocomponent~~ filaments.

11. (once amended) The sensitive surface protective material of claim 1, wherein the electret treatment charges the nonwoven web to about 1 kVDC/cm to about 20 ~~42~~ kVDC/cm.

16. (once amended) The storage sleeve according to claim 13 ~~46~~, further comprising a third web having a top edge, a bottom edge and two side edges,

wherein the second web is positioned between the first web and the third web and the first web and the third web are interconnected with the second web at or near the bottom edge and the two side edges of the first web and the third web to form a pocket to hold an article having a sensitive surface on each side of the second nonwoven web.

20. (once amended) The storage sleeve according to claim 19, wherein the multicomponent thermoplastic filaments are bicomponent filaments comprising a first polymer component and a second polymer component.

23. (once amended) The storage sleeve according to claim 21, wherein the multicomponent thermoplastic filaments comprise a sheath/core configuration and the sheath comprises the first polymer component and the core comprises the second polymer component.

24. (once amended) The storage sleeve according to claim 13, wherein the nonwoven web comprises monocomponent ~~monocomponent~~ thermoplastic filaments.

26. (once amended) The storage sleeve according to claim 13, wherein the electret treatment charges the nonwoven web to about 1 kVDC/cm to about 20 ~~42~~ kVDC/cm.



Inve
Serial
Date
Title

() A
() E
() Is
() P
() F
() N
()

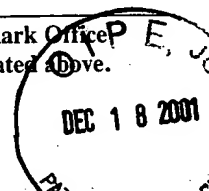
Inventor(s): Singer et al.
Serial No.: 09/954,807 Docket No.: 17037B
Date Filed: September 12, 2001 Attorney RHD
Title: Protective Electret Treated Nonwoven Web For Sensitive Surfaces

- ☐ Amendment (in response to O.A. mailed ____)
☐ Extension of Time
☐ Issue Fee ☐ Appeal Brief
☐ PTO 1595/Assignment ☐ CPA Request Transmittal
☒ Formal Drawings ☒ Information Disclosure Statement
☐ Notice of Appeal ☐ Missing Parts of Application

RHD/SS

ent

The stamp of the U.S. Patent and Trademark Office hereon indicates receipt of the items indicated above.



RECEIVED
MAR 18 2003
TC 1700 MAIL ROOM